DE®	OFFICE OF WASTE MANAGEMENT AND RADIOLOGICAL PROTECTION POLICY AND PROCEDURE		DEPARTMENT OF ENVIRONMENTAL QUALITY
Original Effective Date: August 23, 2012	Subject: Dental Amalgam Waste Removal Systems Program Name: Medical Waste Regulatory Program		Category:
Revised Date: Reformatted Date: July 5, 2013	Number: OWMRP-368-138-01	Page: 1 of 3	External/Non-Interpretive ⊠ External/Interpretive

A Department of Environmental Quality (DEQ) Policy and Procedure cannot establish regulatory requirements for parties outside of the DEQ. This document provides direction to DEQ staff regarding the implementation of rules and laws administered by the DEQ. It is merely explanatory; does not affect the rights of, or procedures and practices available to, the public; and does not have the force and effect of law.

INTRODUCTION:

Dental offices install systems to remove dental amalgam from their drains in an effort to reduce the amount of mercury that is discharged to the sewers¹. This division policy and procedure describes the applicability of the Medical Waste Regulatory Act (MWRA), Part 138 of the Public Health Code, 1978 PA 368, as amended (Act 368), to those systems.

AUTHORITY:

The development and use of this Policy and Procedure is based upon existing authority under Sections 13811(b)(v) and (c)(v) of the MWRA.

STAKEHOLDER INVOLVEMENT:

The guidance was developed in consultation with Office of Waste Management and Radiological Protection (OWMRP) and program staff from other divisions within the DEQ, a policy analyst from the Department of Licensing and Regulatory Affairs (LARA), several industry stakeholders that manufacture holding tank systems, and a legislative affairs liaison from the Michigan Dental Association. The OWMRP disseminated the draft policy and procedure to all interested parties, afforded an adequate time period for review of the document and submittal of any associated comments or requested changes, and revised the document to incorporate any input received within the constraints of any applicable regulatory limitations.

DEFINITIONS:

An "amalgam separator" means a device designed to remove, at a minimum, 95 percent of dental amalgam waste particles from dental office wastewater.

A "holding tank" means a closed, watertight sealed structure designed and used to receive and store wastewater. Holding tanks are designed and constructed for ultimate disposal of collected wastewater at another site.

¹ Most dentists are required under the Amalgam Separator Act, 2008 PA 503, which amended Act 368 by adding Section 16631 to Part 166, Dentistry, to install a separator by December 31, 2013.

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POLICY:

Under Section 13805(8) of the MWRA, medical waste includes blood and pathological waste. The materials collected by amalgam separators and holding tanks at dental offices are medical waste because of the blood and gum tissue that is collected from, or contained in, the wastewater.

Under Section 13809(h) of the MWRA, medical waste cannot be stored at the producing facility for more than 90 days. How that 90-day storage limit applies to medical waste in amalgam separators and holding tanks requires clarification.

Amalgam separators and holding tanks are installed in the drain system and become an integral part of it. Both systems operate continuously until either the cartridge or filter needs to be replaced or the tank needs to be emptied. If these systems were to be considered as storage devices for medical waste only, they would be required to be serviced at least every 90 days to remove cartridges or filters, or to empty tanks, regardless of whether the cartridges, filters, or tanks had more capacity. However, servicing of these systems every 90 days to remove collected medical waste is not necessary to "protect and prevent the medical waste from release" prior to ultimate disposal, which is the standard under Section 13809(a). Further, manufacturer specifications for amalgam separators and holding tanks identify when the systems must be serviced to ensure that they function as designed to remove amalgam from the wastewater.

Therefore, an amalgam separator or holding tank approved by the DEQ under Sections 13811(b)(v) and (c)(v) as part of an overall system to properly collect, store, and dispose of dental amalgam and any associated medical waste, is subject to all of the following conditions:

- The amalgam separator or holding tank must have a third-party evaluation attesting to the system's performance as an amalgam collection unit (International Organization for Standardization's Standard 11143:2008 for amalgam separators, National Sanitation Foundation International Special Study, including Test Plan Development, Testing, and Certification of Device for holding tanks, etc.).
- 2. The amalgam separator or holding tank must be installed and maintained in accordance with manufacturer specifications.
- 3. Cartridges or filters must be replaced and tanks must be emptied in accordance with manufacturer recommendations and other applicable laws², not within every 90 days, unless required by the manufacturer.
- 4. A holding tank must be emptied as needed to prevent nuisance odors inside or outside of the facility due to putrefaction of any waste stored in the holding tank.

² For example, proposed rules under the Amalgam Separator Act, 2008 PA 503, specify that cartridges used in amalgam separators must be changed per the manufacturer's specifications, which typically vary from every six months to once per year.

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- 5. Any cartridges, filters, wastewater, or other material removed from an amalgam separator or holding tank must be managed in accordance with the MWRA and other applicable laws³.
- 6. Wastes removed from a holding tank system or amalgam separator shall not be discharged to a sanitary sewer, wastewater treatment plant, or on-site sewer system. The wastes must be recycled or solidified and disposed in a landfill.

Nothing in this division policy and procedure precludes or exempts this process or subsequent hauling and disposal of the waste from any rules or regulations under the jurisdiction of the United States Department of Transportation, such as labeling, transporting, and packaging requirements, nor does it negate any rules and regulations pertaining to these waste streams in other states in the event that these wastes are transported for treatment and disposal outside of Michigan. It is recommended that the individual hazardous waste and/or medical waste disposal vendor be contacted to verify the types of waste that they are qualified to accept for treatment and disposal.

REFERENCES:

The MWRA; Part 121, Liquid Industrial Wastes, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); Part 111, Hazardous Waste Management, of Act 451; Wastewater Discharge Rules promulgated pursuant to Part 31, Water Resources Protection, of Act 451; On-Site Wastewater Rules promulgated pursuant to the Land Division Act, 1967 PA 288, as amended; and the Amalgam Separator Act, 2008 PA 503.

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³Material that is characteristically hazardous for mercury (> 0.2 mg/l mercury) is subject to regulation under Part 111 of Act 451, unless it is a conditionally-exempt small quantity or unless it is recycled. Medical waste is exempt from regulation under Part 121 of Act 451. Materials removed from an amalgam separator are subject to regulation under the Amalgam Separator Act, 2008 PA 503.